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approach

The Naval Aviation Safety Review



Det Mentality Quiz

By Cdr. Mark Danielson

Many people talk about a change that takes place in your mental state when you operate away from home base. Here is a chance to be honest with yourself and determine if you do, in fact, operate by a different set of rules on det.

Answer these questions as they pertain to your being on det. Your total score will enable you to determine your "detachment state of mind."

Category	Frequency			
	Never 0 points	Seldom 1 point	Often 2 points	Always 3 points
1. I have flown non-standard formation on det.				
2. I have flown non-standard break altitudes on det.				
3. I have flown unauthorized maneuvers because of peer pressure.				
4. I have flown at excessive speed in the break.				
5. I have flown non-briefed, ACM "free for all's" after the mission.				
6. I have self-medicated to avoid missing a flight.				
7. I have flown with inadequate crew rest.				
8. I have flown with a hangover following a "big night."				
9. I have not written a MAF to avoid "downing" a jet.				
10. I have driven or ridden in rental cars that were being operated in a reckless manner				
11. I whistle while I pack my bags "when leaving on det."				

Your state of mind.

5 points: **saint** 6-10: **priest** 11-15: **skipper** 16-20: **nugget**

Cdr. Danielson is the ASO for NAS Dallas. He was also recently selected as *Approach's* contributor of the year for 1990.



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INCORRECT VOLUME NUMBER, SHOULD READ VOLUME 36.

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FEATURES

- PAOs At the Mishap, or: You Can't Run From Bad News** 2
By JOC Bobbie Carleton

- Helo Dunker Training Saves Lives in Ferry Mishap** 5
By Ltjg. Dave Gluck

- The Big Sky Theory** 6
By Cdr. E.J. Sullivan

- "We've got a bird in the water."** 8
By Lt. C.S. Ude

- Pop! Goes the Mainmount** 10
By Lt. Shawn P. Oliver

- Sleigh Ride** 11
By Ltjg. Greg Thomas

- When Bad Turns Worse** 12
By Lt. Reed M. Potecha

- "So Where's My Article?", or How We Do Business** 14
By Peter Mersky

On the cover:

F/A-18s of VFA-113 on board USS *Constellation* (CV-64). Photo by Ltjg. Lance Chang, VAW-113



see page 2



see page 12



see page 26



see page 30

- High Clouds, Low Clouds, Middle Clouds, Too!** 16
By Lt. Thomas Lerch

- "Look" for the Overlooked** 18
By Lt. Dan Anderson

- Fatal Distraction** 24
By LCdr. Michael G. Hegland

- It's Not Just Paradise; It's A Responsibility** 26
By Lt. Steve Burris

- Where's My Night Light?** 28
By Lt. Patrick Falley

- I've Got My Wings. Who Says I Need a Baby Sitter?** 29 1
By Lt. W.D. Stone

- And Now... For the Rest of the Story** 30
By LCdr. F.M. Benkert

DEPARTMENTS

- Bravo Zulu** 20
Brownshoes in Action Comix IBC

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PAOs At the Mishap, or: You Can't Run From Bad News

By JOC Bobbie Carleton



"F-14 down, about 10 miles out..."

2 I got the word and snapped open my desk log. I knew that my day was going to be crazy as I started punching the ODO's number. I could hear five other phones start ringing. The news media and other people had picked up the mishap on their scanners and were already dialing my number.

The Duty Officer gave me the story. A local fighter had gone down where the state road intersects the interstate. The tower had seen two good chutes, 11 miles away and also smoke from a fire. I knew that the area in which the Tomcat had crashed was populated and that injuries were virtually guaranteed.

I called the squadron PAO and recommended that he get to the crash site quickly, and be prepared to handle the press. I'd be right behind him.

The local TV stations were already showing scenes of the flames, smashed buildings and firefighters. One shot showed a closeup of a flight helmet with the crewman's last name plainly visible on the back.

While I was dialing my third number, I was giving instructions to the staff PAO crew.

"Log all calls. Go ahead and acknowledge the obvious. 'Yes, one of our F-14s has crashed...we don't

have any names yet but we won't release any names until the next of kin are notified'."

I was soon talking to the type commander's PAO. I asked for help on the scene and for him to bring his cellular phone.

"I'll meet you there," he said. "I'm leaving now."

As I reached the crash site, I could see Navy people mixed with medical, fire and police crews. I spotted the squadron PAO and I got his attention. We started comparing notes. With the type commander PAO, we formed an on-scene command information bureau and tried to corral the media, or at least let them know we were there.

Members of the press were everywhere, including some people who said they were with the press but weren't. We were outnumbered and everyone wanted answers immediately. They were in such a hurry to outdo each other that they would lose patience and grab anyone in uniform to ask questions. The media created a lot of pressure on the police and became a nuisance to the officials who were trying to deal with injuries, flames, scattered airplane pieces and security. We finally linked up with the police spokesman and I thought we might have everything under control. Not yet.

I gave the squadron PAO a quick brief.

"You're the spokesman. Don't speculate on the cause of the mishap. Tell them that there will be a thorough investigation..." Out of the corner of my eye, I could see someone talking to a reporter. What worried me was all those other people the reporters were interviewing. Not just the civilian bystanders but Navy people, too, trying to help the reporters get a story. I couldn't believe how many "retired experts" there were in that crowd.

The media consumed every imaginable version of the crash. One scenario had the F-14 flying inverted and the aircrew punching out and going through the roof of an apartment building. Other reports said that the person at the controls was a RIO, even in follow-up reports seven months later! Some versions suggested that the crew was trying to land at the municipal field but gave up, pointing the jet toward the field and ejecting. All of these stories were false but based on what bystanders had come up with. One crewman was critically injured and a TV station identified him before his next of kin were called. To make matters worse, the press even harassed the family for interviews.

Some squadrons don't think that the public affairs section of the mishap plan is important. "If we have a

mishap, I'm going to be busy. The press can wait," many squadron PAOs say.

Fortunately that wasn't the attitude in this mishap. In spite of considerable damage and a lot of misinformation getting to the press, the squadron public affairs officer knew what he was doing.

During a recent mishap in which we lost both aircrewmembers, the funeral home actually took it upon itself to call the media and invite them to the memorial service! They claimed that it was the family's wish, which was not what the family told the squadron CACO and XO. It's just a reminder that you should be prepared for anything.

If the PAO doesn't jump in right away, someone else will, too often someone who hasn't a clue as to how to handle the situation. The media can create excessive pressure on a rescue scene. Unauthorized or misinformed people can seriously distort the public's view of the incident.

Know who the spokesmen are when your squadron has emergencies while deployed and at home. It could be your functional wing PAO, CARGRU PAO, TYCOM PAO, or air station commander.

Public-affairs planning is part of the squadron mishap plan. Make sure that the squadron PAO is





PH3 Perry

4

notified when there is a mishap. He should know who to contact. A cookbook checklist can solve most problems. Here are a few points to include.

- What happened? (A basic timeline of the mishap flight)

- Who was involved? (Names and ranks of the aircrew, squadron—this is only for official use. The spokesperson won't release names until the next of kin are notified.)

- Where did the mishap occur? (Location as best as you can describe. If it happened during CV ops, how far from the ship?)

- When? (Give local time, as well as zulu time if deployed.)

- How? (General—not specific—circumstances of the mishap, i.e. what type of mission and was the aircraft returning or departing.)

- Why? (Don't answer this question! While "why" can be discussed internally, the only releasable information about "why" is "This incident will be investigated by a mishap board.")

After you get through the first onslaught, do the following checklist.

- Get more background on the mishap crew—ages, time in service, family.

- Has the next of kin been notified?

- Aircraft type(s), description if appropriate

- How do the family members want the PAO to handle the media on personal issues? Do they want to give interviews? Will they permit the media near the hospital or at the memorial service? Make sure that the family knows that any media harassment should be reported to the PAO. As hard as these questions are to ask, the answers will help prevent media representatives from showing up on the family's doorstep.

Usually, follow-up information is needed in the days after serious mishaps. Getting the information out quickly shortens the lifespan of bad news, which is the goal of every Navy public affairs representative. Running away from the bad news story where the bad news is obvious will only make the situation worse. ◀

JOC Carleton is the PAO for COMFITA EWING PAC.

Helo Dunker Training

Saves Lives in Ferry Mishap

By Ltjg. Dave Gluck

"Does everyone have their reference point?" asks the crewman.

A rush of water floods the cabin. Then, there's that sinking feeling and the adrenalin-packed last gulp of air. Next comes the slow but deliberate roll until the motion stops and you hang suspended in your harness. Now it's hand-over-hand out the nearest exit and a short swim to the surface.

The helo-dunker? Not quite. An H-46? Guess again. The Lungi Bay Ferry? On the nose. Our squadron was deployed to Freetown, Sierra Leone, supporting Operation Sharp Edge when all eight KC-130 crewmen experienced a severe case of helo-dunker *deja vu*.

Along with 28 local nationals, they boarded the ferry for the 30-minute crossing. As the passengers took their seats in the cramped cabin, the Americans joked about their route of escape should they need one. This casual bit of foresight played an important part in the events that followed.

A quarter-mile from shore, water began seeping through the bow ramp. Preparing for the worst, the Navy crew opened a few windows for a quick egress. In seconds, the captain saw the problem and applied full power, which collapsed the bow ramp and drove the ferry deeper into the bay. The cabin flooded.

The ferry was in a 30-degree, nose-down attitude and was be-

ginning a starboard roll. The Navy crew tried to help the other passengers, who were panic-stricken. Three crewmen stayed in the cabin searching for passengers until the ferry was upside down. They finally exited out the nearest windows using the hand-over-hand technique.

Once on the surface, the Navy crew pulled the scattered passengers to safety as they floundered in the turbulent bay. They made repeated, unsuccessful attempts at releasing life rafts from under

the overturned hull.

The survivors gathered on the hull until local fishermen arrived and took them into their canoes. Hours later, the ferry was towed to shore where seven unfortunate victims were found still in the cabin.

By using their aircrew survival training, these VR-22 Navy aircrewmembers saved the lives of many people, including themselves. —Ed

Ltjg. Gluck is assigned to VR-22.

PH2(AC) D.G. Wujcik





The Big Sky Theory

by Cdr. E. J. Sullivan

Since Orville took advantage of it on December 17, 1903, the "Big Sky Theory" has become less reliable. With deregulation and hubbing, the sky has virtually become black with aircraft. However, carrier-based aviators have always counted on having the skies to themselves over the ocean. Sure, there may be one or two airliners around, but not enough to worry about. The crowded sky is a domestic issue and doesn't affect the Navy's CV Ops — or does it?

In 1979, there was an average of 356 flights a day across the North Atlantic. In 1989 that average jumped to 493 and is forecast to increase 12-13 percent a year. At the height of the summer travel season, 64 aircraft per hour enter the North Atlantic Track. Does that mean only the P-3 guys out of Keflavik and the occasional North Atlantic Exercise participants have to keep their heads on a swivel?

Aviators who have flown around the Mediterranean lately and counted blinking lights running over and around (hopefully, not through) the marshall stack know there is no "big sky" there. American tourists have forced European sun worshippers to search for less-crowded sands; as a result, routes across the Med have increased.

The newest part of the sky to get congested extends from Europe to the Caribbean and South America. Draw a line from any major airport in Europe to the emerging major hub of San Juan, Puerto Rico and you'll see what happened to the "big sky" around the Atlantic Fleet Weapons Range.

Although the Pacific is a much bigger pond, WESTPAC aviators shouldn't gloat. One day, take the time to visit the FAA's Oakland Center, especially the Oceanic section. Look at the routes and ask about traffic vol-

ume; then overlay the CV OP Areas. Can you still fly with a "big sky" mentality?

Air traffic is growing exponentially and the traveling public has the right to expect and demand passage through controlled access and safely monitored airspace. To accommodate both the public and military interests, the FAA and DoD came up with Special Use Airspace. To accommodate oceanic traffic and ICAO regulations, the altitude reservation (ALTRV) system allows military and civil operations to be safely segregated. Special Use Airspace areas and ALTRVs ensure the safe separation of military flights from commercial air traffic, not the inviolability of military operations. When a military aircraft spills out of the ALTRV, Warning Area, Restricted Area, or MOA, it jeopardizes the safety of hundreds of people, and the FAA takes immediate notice.

When military aircraft are cleared into Special Use Airspace, that is their clearance limit. Like any ATC clearance, failure to follow it is considered a pilot deviation. Read paragraphs 340, 341 and 346 of OPNAV 3710.7N to see what a "little spillout" may entail.

I am a military advocate, but even I have come to the realization that the Big Sky Theory is dead. Know what your assigned airspace is and stay there. Remember, the guy flying VFR in his Cessna is well within his rights to transit the MOA or Warning Area. Don't depend on him or the 747 drivers to see and avoid you. ◀

The Naval Safety Center staff has seen a lot of message traffic about near-misses with civilian aircraft lately. One West Coast field had two close calls with bug-smashers in the break pattern!
—Ed.

Cdr. Sullivan is the Navy Representative to the FAA for the New England/Eastern Regions.

"We've got a bird in the water."

By Lt. C.S. Ude

"Keep it to yourself," my OIC whispered, "but they've canceled the rest of the day's flight schedule. We've got a bird in the water." The warm, fuzzy feeling I'd had that day quickly evaporated.

"Who was flying?" I asked.

"John. He was out on the range."

I asked him questions out of reflex. Is everyone all right, which plane was it, when did it happen, what were they doing? I was relieved to learn that the flight crew was OK. At least the mishap board would have someone to talk to.

Later that night I thought of more questions. I had flown with John the day before on a Functional Check Flight (FCF), which I used for two purposes. First, it was my own aircraft that was coming out of a NAVAVNDEPOT field-team modification and phase "C." Second, I was finishing a two-week, non-flying period because of a cold and an ear infection. John happened to be the squadron's NATOPS Officer and I thought it would be an excellent opportunity to brush up on FCF and normal flying procedures with one of our more experienced HACs.

For FCFs following the replacement of a main rotor blade, the entire flight went surprisingly well. Although it took us a couple of tries, we successfully completed the



Kaman Aerospace Corporation

FCF, except for the low-fuel light check with 600 pounds of fuel remaining.

"OK, you've got it, Steve," John said. "I've been hogging the stick for a while. Take us back to the field and do what you want."

I couldn't have asked for a better offer, so I said, "I want to do a normal approach first, then some autos, if that's all right."

"That's fine," he replied.

Autorotation: the act of taking a perfectly proper flying airframe, simulating the complete loss of power and riding the bird to the deck. A definite "E" ticket ride; after all, real men don't wear parachutes.

I had just come from a training command tour where I had been a FAM instructor. I had developed my ability to shoot autos to a fine art. However, skills honed in one aircraft type don't necessarily translate to another type of plane. Throughout the months I spent in the RAG, and then in my new fleet squadron, I had never been satisfied with my

autorotations. Granted, I hit all the parameters and could get the H-2 pretty much where I wanted it on the runway, but I still took every chance to practice since I always learned something new with every auto I shot.

So there I sat that night, wondering whether I would have been ready to shoot an immediate autorotation without warning as the aircraft started coming apart on me like it did with John. I realized that neither of us, as we took turns practicing at the end of the FCF, waiting for the low-fuel light to come on, ever dreamed that one of us might have to do an autorotation for real the next day.

When was the last time you shot a practice auto? Were you satisfied with the results? If you are a fixed-wing aviator, are you ready to respond if the aircraft enters uncontrolled flight on takeoff, or in the landing pattern?

The mind set "it'll never happen to me" kills. I'm going to keep practicing my emergency procedures. ◀

Lt. Ude is an H-2 pilot with HSL-37. He previously served as an instructor with HT-18.





PHCS(AC) R.C. Lawson

Goes the Mainmount

By Lt. Shawn P. Oliver

10

We finished briefing a 2 v 2 with the adversaries, and the section aircrew sat down to brief the administrative part of the flight. Squadron SOP mandates a flight-lead-separation takeoff if the wingman doesn't have 250 hours in type; the wingman was 25 hours short of this requirement.

Weather at the field was clear and a million. Both pilots positioned their aircraft on the runway and waited for clearance to take off. Lead gave the runup signal and soon was on his way down the runway. Waiting the normal five seconds seemed like an eternity, but the wingman rolled on time, anxious to join up.

The flight lead lifted and began a slow climb. The wing pilot rotated and looked for the familiar sight of his lead in the quarter panel as he raised the gear handle. Then a disturbing radio call broke the comfortable routine. Departure control told the wing pilot that tower personnel had seen puffs of smoke coming from his aircraft when it lifted off. All engine instruments appeared normal and the aircraft handled fine. The aircrew realized that a tire might have blown during the takeoff roll. The section of aircraft slowed to gear speed and the wingman lowered his landing gear in the normal fashion. Lead confirmed the worst: two blown mainmounts.

NATOPS procedures dictate leaving the landing gear and flaps set as if for takeoff, to prevent any FOD or further damage to the aircraft. Unfortunately, the pilot had

already cycled the gear. After considering all the options, he decided to lower the landing flaps in order to make the approach and engage the arresting gear at a lower speed. The flight ended with an uneventful arrested landing on the off-duty runway. The aircraft suffered no structural damage and, after replacing two mainmounts, was FMC.

It's happened before, and it will happen again: raising the landing-gear handle before the tires lift off the runway. In the Tomcat, when the landing gear have just begun to retract, aircraft systems direct hydraulic pressure to the brakes in order to stop the rotation of the wheels before they enter the well.

We learned and relearned several lessons from this incident. First, the indexer lights are not positive indications that the main landing gear is clear of the runway. The Tomcat strut oleo is approximately three feet long, so the aircraft, depending on rotation attitude, can be flying before the wheels leave the deck. The weight-off-wheels micro switch can activate while the struts are extending, with the tires still touching the runway.

Second, relying on purely visual cues can lead you down the garden path. In this case, the wingman relied on his view of the lead aircraft to make decisions about his own takeoff transition. There is no good substitute for establishing a positive rate of climb, verified with VSI and radalt, waiting a few "potatoes" and then raising the gear. Lt. Oliver is a first-tour pilot with VF-24.

Sleigh

By Ltjg. Greg Thomas

Our two-plane H-46 det was in the Northern Pacific. Sub-zero temperatures, high winds, snow and ice were the norm. We talked to other squadrons and detes about the conditions we'd encounter, and with our newly acquired knowledge and a few extra pairs of long-johns, we felt we were prepared.

During our first week in NORPAC, none of the heavy weather took us by surprise. One particular day we were offshore NAS Far North onboard an AOR. The temperature was in the mid-30s, the skies were partly cloudy and the winds were 10 knots. Intermittent snow blew off the ocean, which required us to occasionally shut down the engines to avoid potential engine-inlet icing. When the temperature warmed to above freezing, the snow melted, leaving puddles of standing water on the NAS's apron.

We had to fly a large contingent of news media reps to the carrier early in the day and return them to the beach in the afternoon. Also, our regular logistics missions kept both helos busy all day. After our log runs, we flew to the NAS to transport the huge backlog of mail and cargo that had accumulated during our transit from California. We delivered some external loads while the ground crew palletized the remaining truckload of mail into tri-walls, which we would carry internally.

Everything went smoothly. Our two Sea Knights were a team. Dash 1 loaded the mail, while Dash 2 took external loads. As darkness set in, the temperatures dipped into the 20s, leaving a clear sky with no moon. Our aircraft was on the apron, rotors turning. The cargo rails were extended from the rear of the helo to load the tri-walls. One aircrewman commented on how slick the apron looked.

Two men were positioning a load on the rails when Dash 2 called inbound for an external pickup. He terminated his approach in a high hover over the VERTREP load which was off to one side. As he pulled power to lift the load, I felt a strange sensation in my aircraft, as though our brakes had

Ride

failed and we were moving.

As my copilot and I stood on the brakes, we realized that we weren't moving forward but sliding sideways on ice. The standing water had frozen. Our playmate's rotor downwash had pushed us across the apron at the same time two crewmen and a fork lift were loading mail.

I felt helpless as I remembered that earlier in the day a C-130 was parked in the direction in which we were sliding. I couldn't see the Herk in the darkness. Dash 2 was now transitioning to forward flight and we stopped sliding as quickly as we had started.

After the excitement of our short sleigh ride, we took a head count to make sure no one had been injured. We radioed Dash 2 about the near-catastrophe. Our OIC in the other H-46 prudently decided to cease operations for the night.

We were lucky that the crewmen had not yet placed the load on the cargo rails before we started sliding. There would have been one crewman on either side of the tri-wall guiding the load up the rails. Each man would have been in a very precarious position since the cargo rails would have definitely left the aircraft.

We had briefed cold weather operations and ice on the flight deck, but we didn't mention anything about one helo blowing another 18,000-pound helo across the apron. When it ices up, I'll always remember this incident, especially when I'm flying with other aircraft. What's safe back home in sunny California can become quite dangerous in colder op areas.

Ltjg. Thomas flies with HC-11.



When BAD...



By Lt. Reed M. Potecha

It was a normal, CV, VAW brief. We were in the North Arabian Sea and had to fly a relatively short AEW hop, a 2.5-hour mission followed by what we thought would be an uneventful night trap.

We talked about the thunderstorms in the area, but recovery weather was forecast to be no worse than 2,500 scattered, with three miles visibility. Actually, the first time I thought there was anything strange was when we were sitting on deck waiting to taxi and an A-6 reported a water spout about 70 nm ahead of the ship.

"I've seen those before," I said to myself. "We can stay away from it, not to worry."

In a short time we were on cat 3. Checking with the back-end crew, we confirmed they were ready to go. Our 52,000-pound E-2 was put in tension. A few seconds from launch, all three NFOs in the back said something over the ICS. During another few tense seconds, with the cat officer waiting to see a salute, we discovered that the vapor cycle had failed. (The vapor cycle is the cooling system for the E-2's electronic systems.) This problem wasn't a safety-of-flight item and we thought we could fix it in the air.

We launched and as we climbed, the NFOs trouble-shot the system. They soon determined the fault and began NATOPS procedures to fix it. As I read the section, a warning caught my eye. It said, "This procedure should be attempted only once. Additional attempts may result in electrical fire..."

That was enough for me and I took a distinct interest in the activities back in the tube. The NFOs kept working

and asked us to secure our INS since it was no longer receiving cooling air from the vapor cycle.

I didn't think there was much to worry about. The E-2 has a secondary attitude source besides the INS and standby gyro. However, our bird had a history of failures of the secondary attitude source and the standby gyro was laying on its side, precessed beyond use.

Great. There we were, in danger of either burning up a million-dollar INS because we didn't have cooling (the CAINS can operate for no more than 30 minutes without airflow), or of reducing ourselves to needle-ball flying on an IFR night. What a choice! We might also have an electrical fire at any moment caused by the fix to the vapor cycle.

We kept the INS on, reset the vapor cycle and chalked it all up as good training involving lots of decision making and a good review of the systems. After all that, I was ready for my night trap, but we still had a few more surprises in store for us.

Within a short time, we were enthralled by the light



show on the horizon. The awesome display of lightning was constant and getting closer. The display was also no longer limited to one direction but covered half of the sky. Everything west of the carrier was lit up like a Christmas tree. We quickly called the ship to PIREP the advancing thunderstorms. Since the ship acknowledged our report, we felt sure that the remaining flights would be canceled and all aircraft would be recalled soon. Well, that didn't happen. A whole cycle of aircraft launched about 30 minutes later. We were surprised but we figured the captain knew something we didn't. It looked bad from our vantage point but we had to trust the professionals on deck.

We entered the holding pattern and waited for our CV-1 approach with 18 other aircraft. Airplane after airplane tried to land with very little success. We watched the lightning intensify and get closer. The most disconcerting thing was that the TACAN needle pointing to the ship was pointing directly at the worst area of the storm.

Minutes in holding soon turned to hours and airplanes were still trying to recover. I planned a bingo to our only alternate, an airstrip in another country, if we didn't begin our approach soon.

I said to myself, "You've got 2,500 hours and have flown in bad weather before." Just then the ship called.

"600, commence your approach."

Fantastic! I thought we were out of danger and I knew we were almost home. Passing through 2,500 feet, at 250 knots, my doubts came back as our lumbering E-2 was tossed about like a toy by severe turbulence. We slowed to max-turbulence airspeed. All I could do was hold on and pray that my experience would see us through. Luckily, at 1,200 feet, the air smoothed out and I breathed a sigh of relief.

This can't get worse...or can it? I thought. I continued

our very nonstandard approach. We arced at 1,200 feet and nine miles as the ship turned 180 degrees, trying to get out of the worst of the weather. I felt like an extra in a cheap war movie as blasts of lightning flashed around me.

At last, the ship stopped turning and I rolled out five miles astern, totally IFR. I continued inbound and waited for Mode II ACLS, but there was no lock-on. I prayed for at least a Mode III talk-down, but no, the controller couldn't see my aircraft on radar.

"Can you fly a self-contained CCA?" he asked.

I had no other choice. Flying my TACAN needle inbound, with my copilot calling altitude checks each half-mile, I started down. Finally the controller said, "Radar contact, 1.5 miles. Continue inbound. Call the ball."

Just then, a bolt of lightning burst directly in front of the ship, momentarily blinding me. I couldn't even see the landing area lights, let alone the meatball. I heard, "Paddles contact. You're lined up slightly right and on glidepath. Call the ball when you get it."

My copilot had been providing the best backup of his life and was staring intently out of his windscreen looking for centerline and the ball. With an 81-foot wingspan, the E-2 must be on centerline to land in the ship's 100-foot landing area. The rain was driving so hard that the ship faded in and out of view. The winds were shifting and making me focus all my attention on lineup. I had to fly the ball; if I didn't, I wouldn't land.

The LSO was talking me down. His voice replaced the meatball I couldn't see. He kept me on glidepath and guided me toward the ship. From the time I broke out of the clouds until my hook caught the wire was only 10 seconds. Never before had 10 seconds seemed like 10 hours to me. As my hook caught the three-wire and we screeched to a halt, all I could think was hallelujah! We're home! ◀

Lt. Potecha is a second-tour pilot with VAW-116.

13

PH3 Duggan

turns to
WORSE



J01 Joe Lancaster

“So, Where’s My Article?”, or How We Do Business

By Peter Mersky

Contributors often ask why their stories are not published more quickly. It’s a reasonable question. When a story arrives that we like but can’t use immediately, we put it in our files, which contain about 250 articles. We receive an average of 300 new articles each year. The problem is that we can only publish 12-15 stories each month. We acknowledge submissions with postcards, indicating that we’ve received the article, and that we are either considering it for future publication or that we decided we couldn’t use it. About 10 percent of all submissions are “killed” outright.

Completing an issue is a balancing act. We try to include a

mix of interesting, thought-provoking articles, address serious hazards and current hot topics, and represent all communities. We also save articles for our popular theme issues that focus on specific areas, such as ejections or weather. We sometimes hold stories for up to 18 months.

Thus, while some authors might be a little bemused when they finally see their articles in print after a long time, we hope they understand that they've played a bigger part in making a specific issue than they may have realized.

We hope these numbers don't sound discouraging. Without reader contributions, *Approach* would not have the immediacy that is so important. Ninety percent of each issue comes from our readers. We welcome and encourage this effort from everyone involved in every phase of Naval Aviation. The prospective *Approach* authors don't have to be professional writers. We'll polish their stories and check them for grammar and punctuation. We are more interested in a story that has an interesting topic, or personal experience that will help save lives and airplanes. That's our mission.

Many squadrons use writing programs, with varied success. A few like VA-27 or VA-95, a three-time winner for *Approach's* command writing award (See January 1991, page 31), have been widely published. Other squadrons are not as successful. They seem to have started with "No one leaves the squadron today without dropping at least two pages of safety stuff in the ASO's basket." We can always tell when it's time for Safety "S"

nominations.

When something goes right, or when somebody goes beyond the normal limits established in NATOPS, we like to tell everyone. That's where our Bravo Zulu feature fits. We usually receive five to ten BZ nominations every month. It's good to see how many folks are doing it right out there, and we try to get their stories into the magazine as quickly as possible. Again, we need your help.

Skippers, while it's OK to have your PAO or ASO write the BZ story, we need to know that you and your CAG or Wing Commander have seen the writeup. These senior chops help prevent surprises after the BZ appears in print. Delays in getting those chops hold up our publishing the BZ. Also, please ensure that the package includes a good-quality 5x7 black-and-white photo of the crew, their full names (no call signs) and your ASO's phone number.

Finally, please remember, *Approach* is definitely your magazine. If you have an experience, or an idea on how to do things better, put it down on paper. Let everyone know. When something is wrong, or of particular concern, we want to get that information out to the fleet with advice and comment about how to correct the fault or defect.

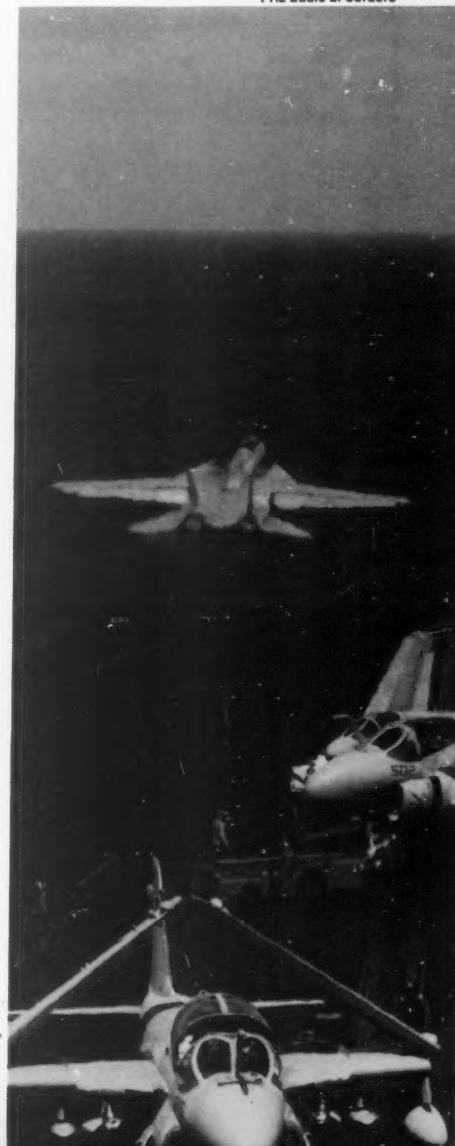
Here's a little insight from a former editor about how he looked at the stories he saw in the magazine when he was in the fleet. Maybe it'll help you when you sit down to write for us.

"I'm an aircrewman with 10 minutes before I man up," he said. "I'm in the ready room looking for something to read. I pick up a copy

of *Approach* and thumb through it. Something in an article catches my eye and I begin to read. In those 10 minutes, I want the magazine to teach me something, even if it's only one item that I can take with me into the cockpit and that might save my life or my airplane."

We try to do that in every issue. If you want to write something but have questions, call us. We'll be glad to discuss your idea and answer your questions. Help us keep *Approach* the best. ◀

PH2 Eddie E. Cordero



High Clouds,

Low Clouds,

Middle

Clouds, Too!



By Lt. Thomas Lerch

My instructor and I were returning from a long-distance cross-country in our T-2. Our first leg took us to an Air Force base where we had the jet refueled. We headed for the weather office to get an updated brief for the rest of the flight home. I can still remember the forecaster telling us we would encounter "some clouds up high, some in the middle and some low stuff, too." We couldn't believe his briefing method and sat down to interpret the data ourselves. There were certainly a lot of clouds, but no apparent thunderstorms, and, the way we saw it, nothing of real concern.

When we returned to the jet, it was fueled, but a member of the ground crew had mistakenly actuated the oxygen switch, draining all the available LOX. The line crew told us it would another 90 minutes to have the oxygen system serviced. My instructor decided that, since we weren't going any higher than 15,000 feet, we wouldn't need oxygen. I didn't feel too comfortable with his decision, but I didn't say anything.

En route, we found the clouds that were mentioned in our weather forecast as well as some very heavy thunderstorms that were beginning to develop. We tried to climb over the tops but they extended to more than 25,000 feet. Without oxygen, it would be a mistake to try to get over them. Our controlling agency soon advised us that the thunderstorms had developed quickly and were now on our nose at 100 miles.

We didn't have enough fuel to go around the storms so we decided to divert to an airfield 125 miles to the south. We told Center who then told us that the field had just closed. We asked for the nearest suitable landing field (we had 30 minutes of fuel on board) and swallowed hard as they told us that the AFB we took off from was the only field within our range.

I had never penetrated a thunderstorm before and had no real desire to try it now, but because of our mistakes we were in a box. With lightning and the blackest clouds I had ever seen, and a fuel supply that would soon be critical, I didn't think the situation could get worse. That's when Center told us about the severe turbulence at FL 220. We ran into the turbulence along with heavy rain and sleet.

The little Buckeye was tossed around as we tried to get through Mother Nature's violence. She was kind to us that day and let us land with a low-fuel light. We checked our aircraft and found severe damage to the intakes, wing leading edges and tail. What a ride!

I ended up with a profound distrust of my ability to interpret weather data. From then on, I decided to leave the forecasts up to the guys who get paid for them. And I never want to penetrate a thunderstorm again.

Lt. Lerch flew A-6s with VA-155. He is currently assigned to VA-185.

17

... There was lightning and the blackest clouds I had ever seen ...

“LOOK” for the Overlooked

By Lt. Dan Anderson

Every Naval Aviator knows the value of habit patterns. They get us through routine portions of a hop safely, in an orderly and disciplined fashion. More importantly, they help us take care of the small things in an emergency. When habit patterns are interrupted, a dangerous void develops. We have to be able to recognize when our habit patterns are broken and proceed with an extra measure of caution.

When habit patterns are interrupted, a dangerous void develops.

My dependence on habit patterns was highlighted during an emergency off the cat that required an immediate landing. At the end of the stroke, I was shocked when all four fire warning lights lit up. I went right into the NATOPS bold-face EPs while my BN called the boss who approved our request for an immediate recovery. The boss said it didn't look like we were on fire.

I took a couple of deep breaths and completed the landing checklist. There were no secondary indications of fire and as I turned off the abeam position I began to relax a little. It looked like this would be just another day trap.

However, as I rolled into the groove, my apprehension reappeared and began to intensify. I was fighting with the stick and every correction was either too much or too little. I was also flying very fast and just couldn't seem to keep the plane on speed. The LSO gave me two hard "Attitude!" calls before I got my hook down into the wires. We just barely picked up the No.4-wire.

As we taxied out of the landing area, the reason for my difficulty became embarrassingly clear. I had difficulty seeing the taxi director over the nose because my seat was in my personal takeoff position: three or four inches down from full-up and tilted forward two inches.

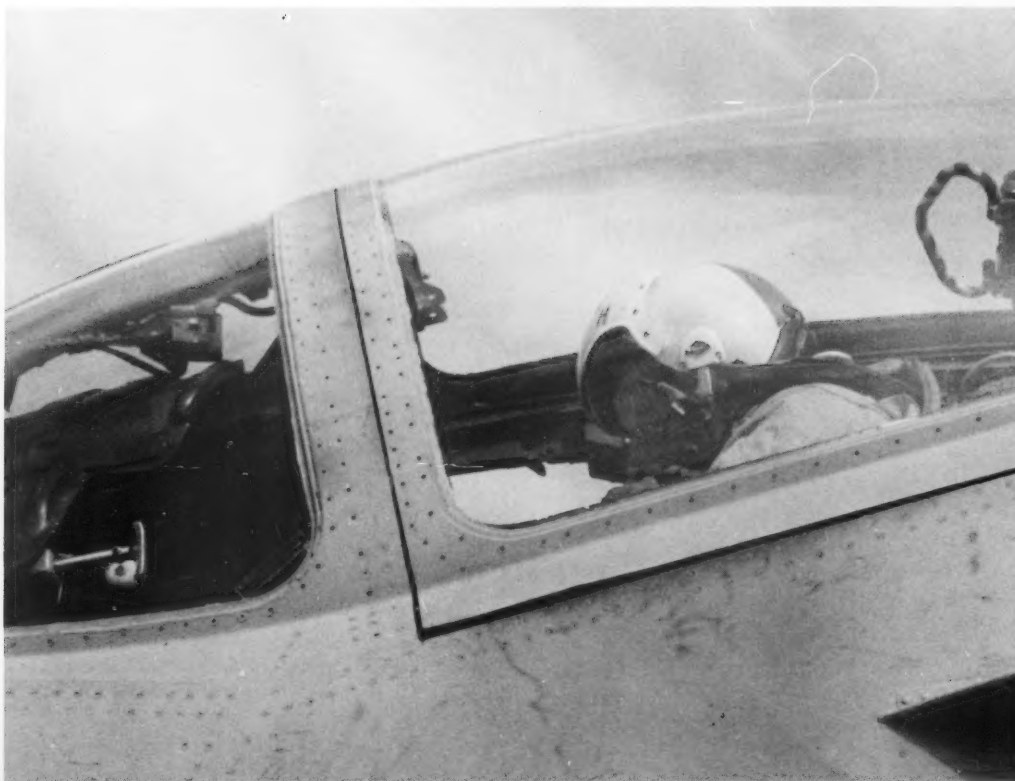
As the shortest pilot in my squadron I use this position because it lets me reach the cat grip. I keep the seat in this position for takeoffs, but I never land like that. I have to raise the seat full-up to see the meatball. No wonder I was flying so fast; I was forced to hold the nose down to see over it!

Why didn't I raise the seat after takeoff? Normally, I raise it as part of my post-takeoff checks. Why did I have difficulty flying the ball? A glance at the auto pilot told me that the normal stability-augmentation mode was off. Without it, the aircraft flew like a truck. But why wasn't the STAB AUG engaged? I always do that right after retracting my flaps and slats. However, we hadn't raised the flaps and slats because we had turned directly downwind.

When you interrupt or replace your usual habit sequence, you can be sure you'll overlook something.

I was shocked to realize how dependent I had become on simple habit pattern and what happens when we don't take care of some non-bold face items. When you interrupt or replace your usual habit sequence, you can be sure you'll overlook something.

Lt. Anderson was an A-6 pilot with VA-95. He is now assigned to VT-24.





From left to right: Lt. Gary Schermerhorn, Lt. Allan Risley

Lt. Gary Schermerhorn
Lt. Allan Risley
VA-34

Lt. Gus Ferrari, Argentine Navy
Lt. Scott Gingery, USNR
Argentine Antisubmarine Naval
Air Squadron

ing mission in their S-2E Tracker. A simulated emergency required that they feather the No. 2 prop, but following the drill, the propeller failed to unfeather. At the same time, the crew lost internal and external communications.

The crew reset generator No. 1

20 Lt. Schermerhorn (pilot) and Lt. Risley (BN) were making a Harpoon missile attack during a night war-at-sea exercise. They were at 700 feet AGL and 480 KIAS when their A-6E's starboard engine failed, causing an uncommanded right yaw and loss of altitude.

Lt. Schermerhorn corrected the yaw and began a climbing turn toward their ship, USS *Dwight D. Eisenhower* (CVN-69). They were in IMC, and Lt. Risley coordinated separation from other aircraft with the controlling E-2C and checked emergency procedures in the PCL.

Two relight attempts were unsuccessful. The crew reviewed single-engine procedures while orbiting overhead as the ship performed an emergency pull-forward.

With a ready deck, the crew dumped to maximum single-engine landing weight and made an approach through scattered rainstorms. Lt. Schermerhorn made an OK-3 trap.

Postflight inspection revealed that an engine fuel line had ruptured, causing the flameout.

Lt. Ferrari (pilot) and Lt. Gingery (COTAC), an exchange officer, left NAS Comandante Espora for a train-



From left to right: Lt. Scott Gingery, Lt. Gus Ferrari

BRAVO ZULU

and began the in-flight-secure checklist and declared an emergency. After they selected AC bus tie, the last checklist item, the aircraft began to vibrate violently and the instruments fluctuated wildly. Deselection of the bus tie stopped the vibrations but left the Tracker without electrical power. Two attempts to reset the No. 1 generator failed.

Loss of electrical power in the S-2E also results in the loss of communications and navigational systems. Both Lt. Ferrari and Lt. Gingery had to hold full left rudder to maintain controlled flight while Lt. Ferrari made a visual approach to the NAS. He touched down on centerline and brought the aircraft to a halt.

The cause of the problem was a broken No. 1 generator cable that left the No. 1 AC bus without power, causing rapid, momentary surges of electrical power to the No.2 AC bus when AC bus tie was selected. The power surges caused the violent vibrations due to momentary connection and disconnection of the single-engine rudder-assist system.

Cdr. Mark F. Klauss
LCdr. John E. Laughlin
Lt. Henry C. Scott
Ltjg. Saul A. Machles
VAW-121

Bluetail 603 launched from USS *Dwight D. Eisenhower* (CVN-69) on a night battle-management mission in the western Med. LCdr. Laughlin (AC)



From left to right: Lt. Henry C. Scott, LCdr. John E. Laughlin, Cdr. Mark F. Klauss, Ltjg. Saul A. Machles

began the 100-mile transit back to the ship after the mission. While making a gradual descent to the Case III marshal stack, he deselected propeller synchronization as part of the approach checklist. The crew then saw a decrease in port propeller rpm with associated swerving and audible fluctuations.

LCdr. Laughlin executed NATOPS procedures for a prop offspeed condition as he discussed the problem with Cdr. Klauss (copilot). They discovered that normal, port-engine rpm could be maintained only with the port prop slaved to the starboard side. The crew chose to fly the approach with synchronization selected. They checked in with marshal and reported their problem.

Cdr. Klauss and LCdr. Laughlin thoroughly briefed the approach, deciding to leave the port engine at a fixed power setting on final to avoid aggravating the situation. They reviewed engine shutdown procedures

and single-engine flight characteristics.

Three miles behind the ship, the pilots reduced power on both engines as they began their final approach. At two miles, the crew saw a slow rpm decay on the port engine. LCdr. Laughlin added power to try to restore normal rpm without success. At one mile and 400 feet, the rpm decayed below acceptable limits. LCdr. Laughlin added power on the starboard engine, retracted the landing gear and executed a wave-off. Cdr. Klauss went through the NATOPS procedures for engine shutdown.

After receiving vectors to a six-mile final, LCdr. Laughlin flew a single-engine approach to an OK 2-wire.

Inspection revealed multiple compound failures in the port engine. The propeller valve-housing assembly was deteriorating, and the oil scavenge system had failed. Continued operation of the engine would have likely resulted in catastrophic failure.



Lt. Michael D. Engel
VT-2

During a midshipman indoctrination flight, at 500 feet AGL and 120 knots, the bleed-air line to the engine of Lt. Engel's T-34C failed, and the engine lost power. Lt. Engel immediately reduced speed to 100 knots, checked his engine instruments and diagnosed the problem as engine rollback.

As the aircraft descended toward the trees less than 300 feet below, Lt. Engel turned toward OLF Choctaw to set up for a landing. He engaged the emergency power lever while completing all NATOPS emergency procedures.

As power returned, he cleared the

trees, declared an emergency and entered the emergency landing pattern at the 90-degree position. He made a successful recovery with no damage to the aircraft or crew injury.

Capt. Chris Gaddis, USMC
1st Lt. Tom Gallagher, USMC
VT-25

Capt. Gaddis (IP) and 1stLt. Gallagher (SNA) were on the last leg of a cross-country to NAS Memphis. At FL 270 and 88 miles from their destination, their TA-4J had a complete electrical failure along with a 20-percent oil light.

Capt. Gaddis set 86 percent power and deployed the RAT, but did not regain electrical power. Flying above a broken cloud layer, the crew had only their barometric instruments, magnetic compass, EGT and RPM gauges. Without ICS, they could only communicate by yelling to each other.

As they established a 2,000-fpm rate-of-descent, they got beneath the undercast and made a 20-degree right turn to locate the Mississippi River.



Left to right: 1stLt. Tom Gallagher, Capt. Chris Gaddis

Turning north toward NAS Memphis, they leveled off at 2,500 feet MSL. According to forecast winds, runway 22 would be the duty runway.

Capt. Gaddis and 1stLt. Gallagher made one low approach to make sure the runway was clear, then turned downwind. As they made their missed approach, the engine and fuel flow began fluctuating. Capt. Gaddis turned the aircraft away from housing near the air station, intercepted a precautionary approach profile, and landed safely.

Inspectors found an open starter door and a badly burned DC converter. The melted input-and-output wiring to the converter caused the electrical failure.

Capt. Mikel F. Blaylock, USMC
Capt. Scott J. Reynolds, USMC
Sgt. Kenneth T. Keller, USMC
HMM-164(C)

As members of the 13th Marine Expeditionary Unit, Capt. Blaylock and his crew were part of the support team during disaster relief efforts following the earthquake in the Philippines in July 1990. The mission was to transport the U.S. Consulate General and three advisors from Manila to Baguio. Another Huey flew as spare and wingman.

Twenty minutes after takeoff, Capt. Blaylock and Capt. Reynolds (copilot) saw a momentary lapse in power in their No. 2 engine. They began to descend, but at 500 AGL and 110 knots, the engine flamed out. Capt. Blaylock began NATOPS procedures while Capt. Reynolds checked for compound emergencies and used the PCL to back up the pilot. Sgt. Keller (crew chief) prepared the passengers and the cabin for a precautionary

BRAVO ZULU



From left to right: Sgt. Keller, Capt. Blaylock, Capt. Reynolds

emergency landing.

The first landing area they saw was not safe because it wasn't long enough for a single-engine approach. Capt. Blaylock flew for another two miles to an abandoned paved road in Cabanatuan where he made an uneventful slide-on landing.

The wingman helped find a suitable landing zone, and assumed on-scene commander duties.

The No. 2 engine's problem was caused by disconnected wires on a cannon plug, which controls the fuel-shutoff.

Lt. Scott C. Fenning
VFA-106

Lt. Fenning launched with an S-3 for a 1 v 1 DACM training flight. After three abeam engagements, the two aircraft set up for a final run. Just before a "fight's on" call, the S-3 pilots, Lt. Ira Saligman and LCdr. Greg Nowak of VS-27, saw a large smoke

trail coming from the aft section of Lt. Fenning's F/A-18.

Lt. Fenning turned for the planned divert and declared an emergency with 5,000 pounds of fuel. He selected the engine monitor display to check for secondary indications, but did not see anything unusual. However, he checked his fuel state and saw a significant decrease in internal fuel; he was down to 3,000 pounds, followed quickly by a low-fuel warning. Realizing he had a massive fuel leak, Lt. Fenning depressed the left fire light, securing the engine and stopping the leak.

He made a half-flap landing at the divert field with 1,600 pounds of fuel remaining. The fuel leak was caused by the failure of a motive flow coupling clamp.

23



My new copilot was well-prepared but he was a little apprehensive about tonight's hop. He'd completed helicopter training when no landing platforms were available and he was about to make his first ship landings at night. As we broke up from our brief and I headed for maintenance control, the SDO hijacked my copilot for a long-distance phone call.

"No problem. I'll meet you downstairs," I told him.

I was finishing my preflight when the copilot approached looking like he had just lost his best friend. As we manned up, he explained that his fiancée, a citizen of Venezuela, had been denied entry into the U.S. His life was ruined.

"Are you sure you're up for this flight?" I asked him, sensitive guy that I am.

We continued with the checklist and discovered an ICS problem. As I signalled for a

troubleshooter, the door in front of us opened and one of my troops stuck his head out, grinning from ear to ear.

I wondered what the joke was. By now a wave of open doors and smiling faces ran the length of the hangar. Now I wondered if I was in the wrong aircraft. Was this one missing half the rotor blades or something equally embarrassing?

Seeing a break in the action while we waited for the troubleshooter, my AD1 ran up to the side of the aircraft.

"Your wife just won \$10,000 at McDonalds," he said.

"I need an AT troubleshooter," I replied.

"No, really, she just won \$10,000 at McDonalds."

"I still need an AT."

The troubleshooter showed up and told us it would be a few minutes while he changed a box. I left the aircraft and fought my way

F A T A L

DISTRACTION

By LCdr. Michael G. Hegland



***"Your wife just won \$10,000 at McDonalds," he said.
"I need an AT troubleshooter," I replied.***

through the crowd of wellwishers to call my wife.

Her line was busy. I tried again. Still busy. It was time to go. The aircraft was ready and we moved briskly through the checklist. We had gone from comfortably ahead of schedule to running a little late. As we taxied, a dose of reality slapped me for some unexplainable reason. Maybe it was instinct or training. Here we were, my copilot and I, a pair of emotional wrecks, going out to fly one of aviation's most demanding tasks: night ship ops. I closed the door on how I would help my wife spend the 10 grand and started concentrating on the task at hand. How was my new copilot doing? Was he really ready for his first-ever night trip to the ship?

I never found out. FACSAC called when we were half-way out to tell us the mission had been canceled. Since that night, I have had a lot of opportunities to examine the role distraction plays in Naval Aviation. Distraction is not confined to the cockpit; it's all around us. Look at your Sierra-Hotel maintenance crewmen who routinely work miracles out on the ship. After two days ashore, it takes them all day to change a light bulb. There are a lot more distractions on the beach.

How about the flight deck crew? Did the guy who just checked your fuel sample see the water or sediment in it or was he worried about his allotment that seems lost in space leaving his family at home without money?

No one is immune, but in the extraordinarily unforgiving world of Naval Aviation, a moment's inattention can produce catastrophic results. That fatal distraction can be brought on by many things. Most of us are pretty good at shutting out our personal

problems unless we are tired or in a hurry. Even if we succeed on the personal front, our aircraft offer plenty of distractions. Errant lights or display irregularities are not life-threatening until we devote a disproportionate amount of time to them. How about tactical displays? Whenever we get focused on a particular task to the exclusion of others, we're opening the door to disaster. One of the catch phrases of the '80s was "loss of situational awareness."

So, how do we avoid these pitfalls? There's no magic answer. The physiologists tell us we need to be physically fit, eat right and get enough rest. Physical preparation makes us less susceptible to fatigue, distraction, complacency and many other evils.

What about flight preparation? Can you expect to maintain the big picture up there in the wild blue yonder if you didn't have it before you launched? Do you know your aircraft's systems and procedures well enough to diagnose the most obscure advisory light and immediately interpret its meaning without committing your entire attention to it? How's your scan? Your best shot at getting and keeping the big picture is to keep your scan moving.

Crew coordination is another key factor in multiplace aircraft. The crew is only as effective as its weakest (most distracted) member. Specific, briefed responsibilities and well-established communication channels are essential in improving safety and mission effectiveness.

There's nothing new here, right? Beating distraction is like losing weight: there's no gimmicks. You just have to work at it and use a little common sense. Being well-prepared is part of being a pro, and your best defense against fatal distraction.

LCdr. Hegland flew SH-60s with HSL-47. He is now in HSL-41.

25



26

It's Not Just Paradise...

By Lt. Steve Burris

Key West offers one of the finest surprises in Naval Aviation: Flying premier adversary aircraft against today's fighters in a tropical setting surrounded by the Gulf of Mexico. Yet, even with this finest duty comes a bit of the mundane and uneventful. Before being qualified as an adversary pilot, a new arrival takes instrument refresher training and familiarization training in the A-4. Sitting in the front seat on an instrument training hop is no more exciting in the adversary world than in the training command.

During a recent training flight, instead of sitting passively and enjoying the spectacular view of the reef or watching charter boats return, the pilot in command maintained a solid scan of the approach course while making multiple GCAs into NAS Key West.

He spotted a stray Cessna 152 that provided approach control with a limited number of radar hits. Taking control of the A-4 and making a prompt and decisive evasive maneuver, this back-seater avoided a certain mid-air collision by only 100 feet. The command learned three excellent points from this incident.

First, the pilot in the front seat failed in his responsibilities as safety observer. Three lives could have been lost. After this incident, he recognized the importance of both crewmen and that passing control of the aircraft to someone else did not mean relinquishing responsibility for continuing flight safety.

When they landed, they reported the NMAC to the FAA and Base Operations ATC. Investigation revealed that the 152 pilot was a German citizen on

vacation. With the FAA's help, new procedures for improved safety for military and civilian traffic were adopted within one week. The FAA and ATC personnel proved that cooperation does exist and that they are eager to work with military aviators to minimize risks for all aviators.

Finally, the squadron recognized the requirement to repeatedly stress various aspects of flight safety. The potential for conflict between neighboring airports is always higher in congested airspace. However, where land is a scarce commodity, such as in Key West, the potential soars higher. In Key West, the local civil field is only three miles from the naval air station. This fact highlights the need for more than one-time course

rules lectures.

Just as aircrew are required to review ejection seats and NATOPS procedures annually, the squadron safety department needs to look at issues that also need regular reminders and updating. Whenever an aircrew stands up in a ready room and passes on experience that can save lives, someone in safety needs to take note and remember that 18 months later, a new set of faces will occupy those chairs.

Review your command's lecture program and make sure that an organized method exists to provide that repetitive training. Also, remember your favorite LSO advice: Scan, scan, scan. ◀

Lt. Burris is an adversary instructor pilot with VF-45, flying the A-4, F-5 and F-16.

It's A Responsibility

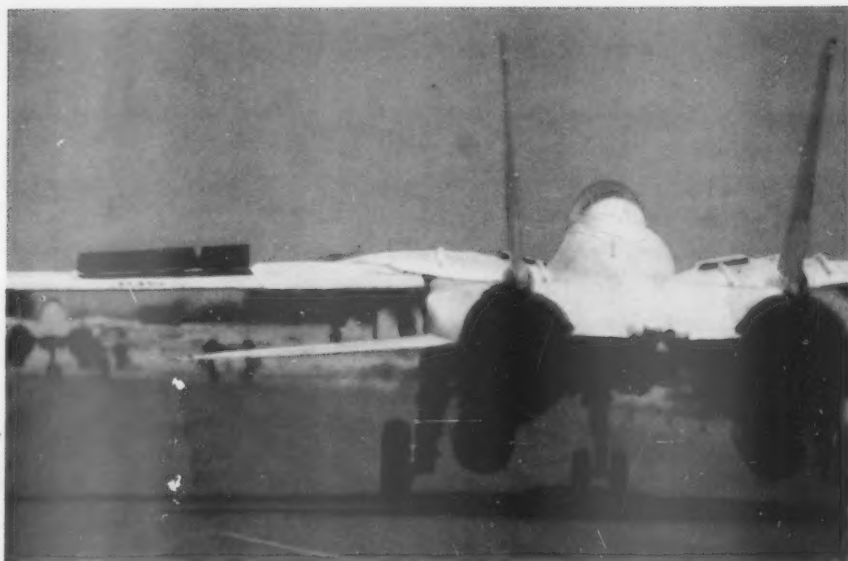
27



approach/february 1991

*Suddenly, a
Tomcat
materialized
out of the
darkness,
much too close!*

PH1 Michael D.P. Flynn



Where's My Night Light?

28

By Lt. Patrick Falley

After two weeks of flying off the beach, CAG Paddles decided the air wing's nuggets needed some FCLP work before the upcoming cruise in the I.O. After we made the required six passes, Paddles rewarded us with a "Roger, ball, last pass." We landed on centerline, rolled to the end of the runway and turned onto the taxiway.

The taxiway wasn't a normal parallel taxiway. It snaked down and away from the runway. It descended to 50 feet below the runway and then climbed back uphill to the ramp. As I approached the ramp, I added power to keep the jet moving. To the right, I could see one Tomcat taxiing toward the line. The taxiway in front looked clear. We were the third F-14 to land in succession.

Where was the second Turkey? Suddenly, a Tomcat materialized out of the darkness, much too close. I jammed on the brakes.

"Anything wrong?" my RIO asked as we skidded to a halt.

"Uh, no," I said in my calmest voice, "we're at the hot-brake checker."

The next day I analyzed what had happened. The Tomcat ahead of me had his lights on, and I should have been able to see his rear position and anti-collision lights. However, these lights are mounted on top of an F-14's vertical stabilizers, and from my perspective (looking uphill) the lights were lost among the lights of a firehouse one-quarter mile beyond. It was a dark night and the only light illuminating the second Tomcat came from the blue taxiway lights. He showed up at approximately 200 feet. At 20 knots taxi speed, it took six seconds for me to travel that distance. Had I been doing something inside the cockpit, six seconds would not have been enough time to stop.

I had not been using the taxi light; I only turn it on when making turns or taxiing in unlighted areas. I think that the fighter community rarely uses taxi lights. Maybe it's a habit from working around the boat. F-14 NATOPS doesn't address this point, nor do most squadron SOPs. What do you do?

Twenty knots is too fast to taxi, especially at night! If this aviator had followed NATOPS and taxied at a slower, "walking" rate, he would have had much more time than six seconds in which to react. — Ed.

Lt. Falley flies with VF-51.

As a nugget pilot on my first set of work-ups, I had to get used to having a cruise-experienced aviator watch over me while I got used to the "fleet" way of doing things.

We were the mission tanker for the fighters and would provide night practice plugs, as well as check out the oncoming KA-6 tanker before our recovery. No big deal. I'd seen it before.

After briefing with the fighter crews, our crew discussed our mission particulars: preflight, launch and mission tanking. After launch, we checked sweet, gave the fighters their gas and plugs, and checked the KA-6. We got vectors for recovery and completed all the approach checks, including checking that the brake-selector switch was in "normal," and the emergency brake-accumulator gauge was fully charged. With a little coaching from the right seat, I trapped, happy to have lived through another night arrestment.

I tried to retard the throttles, but my oxygen mask was tangled up in them. (S-3 crews are not required to wear their masks during normal CV operations.) To retard the throttles to idle, I had to clear away the mask. I had stowed it in the map case behind the throttles and during the arrestment, the mask had been thrown forward and had become lodged behind the throttles.

I removed the mask, retracted the hook and taxied forward. My copilot folded the wings. Once clear of the landing area, I felt that we were taxiing too fast and lightly tapped the brakes, with no effect. At first, I thought that the throttles were not fully retarded, but I saw that they were.

"Slow down," my copilot cautioned. I tried the brakes once more, and suddenly realized I had no brakes! By this time, we were halfway between the landing area and the starboard deck edge, accelerating rapidly.

I've Got My Wings.

Who Says I Need A Baby Sitter?

By Lt. W.D. Stone

I reached down to switch the brake selector mode switch to emergency only to find that the switch was already in the emergency position. I flipped the external lights on and transmitted, "No brakes!" With the deck edge fast approaching, the copilot—my adult leadership—dropped the hook and began a hard, right turn with nosewheel steering. We crunched to a halt into the right

side of a chained and chocked Tomcat. Fortunately, the impact wasn't severe and both aircraft received only minimal damage. The deck crew chained us where we were and we shut down.

How close had we come to going over the side? Well, the nosewheel had brushed against the scupper just as we'd started to turn. And, since we were on an elevator, there was no catwalk. If we had continued straight ahead, it would have been a long drop to a dark and dangerous swim.

The investigation found that the emergency brake system had been improperly serviced. The system had been depleted after only a few pumps on the pedals. But, I wondered, how did the brake selector get into the emergency position? We had seen it in the normal position during our approach checks.

After some experimentation, the board concluded that my oxygen mask had moved the switch to the emergency position when I tried to retard the throttles, or when I removed the mask.

By itself, each element in this chain of events—improper servicing and stowing cockpit gear—would never have put me in that predicament. Put them together and we had all the ingredients for a disaster.

Even though I knew the emergency procedures for brake failure, experiencing it gave me a much greater appreciation for the fact that a system can fail at the worst possible moment. NATOPS takes you only so far; what do you do when you run out of procedures and you're still heading for the edge? My "baby sitter" in the right seat went one step beyond NATOPS and saved the aircraft and probably our lives.

This incident and the recent loss of helmets during deck-level ejections, reinforces the point that S-3 crews should wear their oxygen masks during take-offs and landings. — Ed.

Lt. Stone is an S-3 pilot with VS-28.



And Now. . .

By LCdr. F. M. Benkert

For the Rest of the Story

30



U.S. Navy Photo

When was the last time your unit's Safety Officer told you how he saved the world and made it safe for democracy? You were probably a bit skeptical, weren't you? After all, the guys in the safety department don't fix aircraft or write the schedule. Maybe you think his job is to present safety briefs, and you know how boring they can be. He passes out *Approach*, *Mech*, other safety documents and an occasional quiz. You may have heard that the Safety Officer also trains members of the Aircraft Mishap Board (AMB).

What you may not know is your Aviation Safety

Officer is one of the critical members of the Naval Aviation safety program, which is one of the most successful programs ever developed for preventing aircraft mishaps.

Each time the crash alarm sounds or a report is received on a stricken bird, the aircraft mishap board assembles and settles up its sleeves for action. Behind the board and sometimes behind the scenes, an entire support mechanism settles into place. The squadron taps the resources of its aircrew, maintainers, supervisors and support

personnel. They gather insight on current aircraft operations, and collect information about maintenance practices and procedures, and the aeromedical backgrounds of the aircrew involved in the mishap. The board also uses various assets (including personnel, logistics and engineering) from nearby squadrons or bases to support the investigation at the impact site.

Other local experts help the AMB figure out what went wrong. The board gets information from facilities and agencies including the FAA, metro, the tower, and medical personnel.

As the AMB hits the field, the Naval Safety

Center launches an aircraft mishap investigator to help recover and analyze the wreck. The investigator's bag of tricks includes a complete list of experts who can be called upon to provide technical support. Some of these experts are manufacturer's representatives, but the most frequently used experts are the engineers and artisans from a Naval Aviation Depot (NADEP). If the AMB discovers a material failure, the NADEP informs the NAVAIRSYSCOM class desk officer. He quickly mobilizes NAVAIR's resources to engineer a fix and sends the information to the fleet. Your maintenance folks may recognize the fix in the form of a bulletin or a change. Sometimes a technical document will be revised, a manufacturing or rework procedure will be amended, or new components manufactured and installed. In all cases, the goal is to eliminate the hazards found during investigations.

NAVAIRSYSCOM has personnel at various aviation-related engineering centers or developmental agencies who provide specialized, technical advice. If a mishap involves catapults and arresting equipment, for example, NAEC Lakehurst will assist; for ejection seats and parachutes, NWC China Lake; and aviation life support equipment, NADC Warminster.

You probably know the number of mishaps that have occurred this year. You may not know how many mishaps have been prevented. Although this number is exceedingly difficult to determine, the

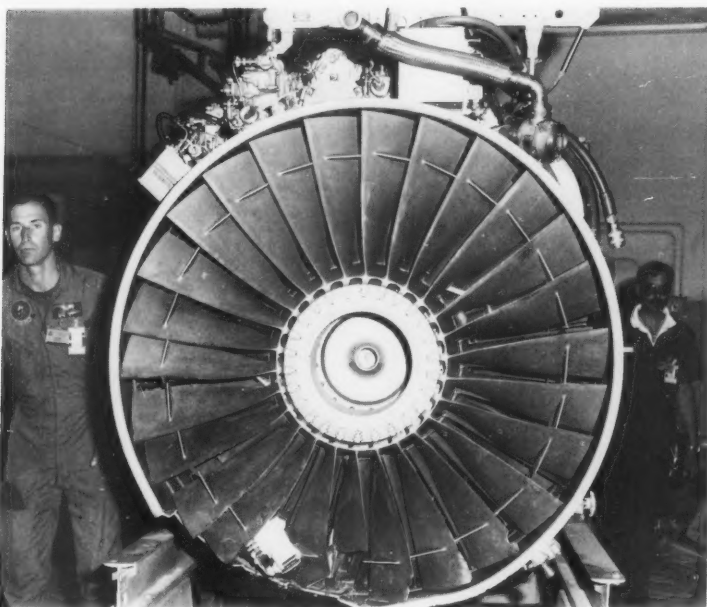


Naval Safety Center has been able to document a number of these saves. As a result of the investigation of six Class A mishaps for CY 1990, the Navy/Marine Corps safety team has directly prevented 40 other mishaps. The total cost of those 40 aircraft is \$556 million.

These numbers are not fictitious. The summary of aircraft saved counts the number of impending failures discovered. The summary, which we will publish semiannually, only incorporates known material failures. It does not count the intangible savings, which result from such factors as improved training and design modifications.

These dramatic results could not have occurred without commitment to the Naval Aviation safety program throughout the entire chain of command. From the newest airman, through the shop supervisors, the aircrews, to the Commanding Officer, everyone can contribute to the squadron's effort to prevent another mishap. The next time you see the Safety Officer, recognize him as a critical element and a representative of a larger team that is saving lives and aircraft.

LCdr. Benkert is a mishap investigator at the Naval Safety Center.



U.S. Navy Photo

Has Anybody Seen My Keys?

By Ltjg. Jess Tillman

Prior to starting the Prowler's engines during the first launch, my pilot laughed as the Flight Deck Coordinator displayed a set of keys, apparently found on the flight deck. We all mocked the fool who lost a set of keys on the deck. The pilot asked whether anyone in the cockpit was missing anything.

I looked down at my shoulder pocket and saw the zipper was partly open. As I thought back, I couldn't remember if I had put my keys in that pocket or not. I meekly told the other ECMO next to me that the keys might be mine. He laughed and quipped that I had better show up at the maintenance debrief with my wallet. I put the incident out of my mind and concentrated on the mission ahead.

Later, I learned the keys were found on a ledge in the left main landing-gear well just below the RAT compartment. In the EA-6B, the RAT compartment opens from the top and is open for preflight inspection. During my walkaround, I leaned over to inspect this area, and the keys fell from my partly opened shoulder pocket into the RAT compartment.

I should have preflighted myself prior to walking up to the "roof." If the keys had gone undiscovered, they could have easily jammed the main gear doors or become a FOD hazard. If they had fallen out in the cockpit, they might have interfered with the flight controls or ejection seats.

Next time you man up, take a few minutes to inventory yourself. Ensure you know what you're carrying into the airplane so you can check to see if it's still there after the hop. Most of all, if you discover something is missing, regardless of the size, swallow your pride and tell somebody about it.

Ltjg. Tillman is an EA-6B ECMO with VAQ-140.



BROWNSHOES IN ACTION COMIX

"The kind real aviators like"
By Lt. Ward Carroll

Hey, newest shipmates, are you tired of arcing around the 0-3 level with guys hailing you with, "Yo, new guy." Do you feel left out when the lineup shows "Flames," "Wheezer," "Thunderdog," and "Bob"? **BSIA** is here to help! Simply xerox the following form, fill it out and mail it to our staff of callsign experts in care of *Approach*. We'll have you tagged as one of the boys in no time at all!

1. Sports, hobbies _____
2. Habits, vices _____
3. "One time I did something kind of silly..." (write silly incident)

4. "I am most influenced by Plato's _____ . (enter which of
Plato's works has guided the way you've lived your life.)
5. Last three books read _____

6. "You can give me any callsign but _____ (enter callsign
that would really make you angry or embarrassed.)

"It would be fair to say I
was kind of a loser before
Browns shoes in action
helped me"



Ltjg. Norman "Boof" Kolowski

Browns shoes is here to help. There is no charge for this service.
(Allow 4-6 weeks for the creative process to take place. All callsigns are
final and the staff of **BSIA** is not liable for any psychological problems that
may result from callsign assignment.)

Note: With this issue, we say good-bye to Lt. Ward Carroll, who joins
the Pukin' Dogs of VF-143. We will miss the wit, innovation, and the
don't-wait-for-permission enthusiasm of Dangerboy's alter-ego.

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Inflight Refueling



PH3 Lenahan

a Probing Experience

Poster Idea Contributed by CDR P.C. Metzger

